REMARKS/ARGUMENTS

Claims 7-11 and 21-31 are pending.

Claims 7-11 and 21-31 were rejected under 35 U.S.C. § 102(e) for allegedly being anticipated by Lei et al., U.S. Patent No. 6,487,552.

Claim 21 has been amended to recite "one or more column references," as recited in claim 7 and claim 27. The other claims have not been amended.

An aspect of the present invention is set forth in independent claim 7, wherein a method for accessing a relational database includes providing a SELECT statement having a select clause. The select clause comprises one or more column references. The one or more column references are modified according to the access policy to produce a modified query.

The examiner rejects claim 7 in the instant Office action. The examiner argues on page 2 of the Office action:

> The query Q3 includes a SELECT statement (the command "SELECT") and a SELECT clause (the predicate "from t"). The term "t" refers to an entire table, and thus references all the columns in the table "t".
>
> In the modified query (Q4), the column references of "t" are replaced by a mask function "t.lang", which corresponds to a specific language in the table "t". This causes specific columns in the table "t" to be selected. The access policy is "Get Context Value (Language) which determines which columns are selected (col. 14, lines 19-20).

With all due respect, based on the foregoing assertions, the examiner appears to misunderstand possibly the most commonly used statement in relational databases, namely, the SELECT statement. Attached as Appendix A is a photocopy of selected pages from an SQL reference book entitled "SQL: The Complete Reference," by Groff and Weinberg, 1999, a publication by Osborne/McGraw-Hill. The selected pages 92-95 show the full form of the SELECT statement.

As explained on page 93, the SELECT statement consists of six clauses and includes the SELECT and FROM clauses. The authors show in Fig. 6-1 on page 95 the syntax of

the SELECT statement. Kindly refer to page 94 for a discussion of the SELECT clause and the FROM clause.

Proper Interpretation of the Query Q3

With respect to pending claim 7, the claim recites a "SELECT statement having a select clause." The examiner, points to the SELECT statement of query Q3 of Lei et al. and mistakenly identifies the "predicate 'from t' " as being the SELECT clause. Firstly, the SELECT clause of query Q3 is:

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SELECT *
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Secondly, what the examiner identifies as the "predicate 'from t' " is not a predicate as understood by those in the relevant art. A predicate is a conditional expression which evaluates to true or false. The "from t" described by Lei et al. is in fact the FROM clause of query Q3, namely:

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from t
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and simply identifies a table containing data to be retrieved by the query. See, for example, Appendix A, page 94, the discussion of the FROM clause. Therefore, a proper reading of the query Q3 of Lei et al. is that the select clause in that query is "SELECT *."

Proper Interpretation of the Recited "one or more column references"

Claim 7 recites "the select clause having one or more column references" and "replacing at least one of said one or more column references ... to produce a modified query." The examiner refers to the term "t" specified in the FROM clause of query Q3 and notes that the table referred to by "t" references all the columns in the table. This interpretation might be valid. Nevertheless, the "one or more column references" recited in claim 7 does not read on the term "t" of the FROM clause of Lei et al. As discussed above, the SELECT clause in the query Q3 of Lei et al. is "SELECT *". Therefore, it is respectfully and earnestly submitted that the recited "one or more column references" of claim 7 reads on " * ", and does not read on "t" as asserted by the examiner.

"replacing at least one of said one or more column references"

Claim 7 recites "replacing at least one of said one or more column references ... to produce a modified query." It is not disputed that Q4 of Lei et al. is a modified query. The distinction, however, is in the manner by which Q3 has been modified by Let et al. to produce their query Q4. The following table clearly shows the transformation:

		Q3 (Before rewriting)	Q4 (After rewriting)
Select Statement	Select Clause	SELECT *	SELECT *
	From Clause	from t	from t
	Where Clause	(not present)	Where t.lang=GetContextValue(language)

As can be seen, Lei et al. add a WHERE clause, which by the way includes the "predicate" t.lang= GetContextValue(language), to Q3 to produce Q4. Firstly, therefore, Lei et al. do not produce a modified query by "replacing at least one of said one or more column references." As can be seen, the SELECT clause is unchanged between Q3 and Q4. Second, even if *arguendo* we accept the examiner's improper interpretation that the table reference "t" in their FROM clause constitutes the recited column references, Lei et al. still do not show "replacing at least one of said one or more column references" because they clearly do not modify the FROM clause between Q3 and Q4.

As understood, the examiner explains that the expression in the WHERE clause "causes specific columns in the table 't' to be selected" to support his assertion that Lei et al. teach the column references of "t" are replaced, citing column 14, lines 19-20. First, the condition specified by the WHERE clause does not cause specific columns to be selected. Rather, the WHERE clause causes specific rows to be selected. This is the purpose of the WHERE clause, and is well known by those of ordinary skill in the relevant arts. In fact, Lei et al. describe this functionality in column 14, lines 15-20 where, "In this example, the predicate appended to the received query restricts the rows selected by the query to those rows of table t where the value in the 'lang' column equals the current value of the 'language' context attribute."

(underlining added). The rows are selected to satisfy the condition in the WHERE clause, namely:

```
t.lang=GetContextValue(language)
```

It appears the examiner cited only lines 19-20 from column 14 and understandably reached an incorrect interpretation of the operation of the WHERE clause as a result of reading lines 19-20 out of context. The WHERE clause has the effect of selecting specific rows. This in no way teaches the recited "replacing at least on of said one or more column references" of claim 7.

For any one of the foregoing reasons, it is earnestly submitted that the Section 102 rejection of independent claim 7 is overcome. The Section 102 rejection of the claims depending from claim 7, namely claims 8-11, is likewise overcome.

Rejection of Claims 21-31

Claims 21-31 are likewise patentably distinct over Lei et al. for any of the reasons set forth above. Independent claim 21 sets forth "a database query ... comprising a SELECT clause and a FROM clause." The SELECT clause comprises "one or more column references" in a table of a relational database. A modified query is produced by "replacing one or more of said column references."

The examiner cited queries Q5 and Q6 of Lei et al. in support of his Section 102 rejection of claim 21. It is puzzling that the examiner here has correctly identified query Q5 as having a SELECT clause distinct from the FROM clause; whereas in the rejection of claim 7 he seems to have missed this fundamental distinction with regard to query Q3. Nonetheless, Lei et al. still do not show "replacing one or more of said column references" where the column references constitute the SELECT clause. The following table showing the queries Q5 and Q6 of Lei et al. clearly shows that the modification of query Q5 does not involve "replacing one or more of said column references" to produce query Q6:

		Rewriting to Q5	Rewriting to Q6
Select Statement	Select Clause	SELECT *	SELECT *
	From Clause	from t	from t
	Where Clause	Where t.dept_no =GetContextValue(dept_id)	Where t.dept_no =GetContextValue(dept_id) AND 1=2

It is clear that Lei et al. do not show producing a modified query by "replacing one or more of said column references" of the SELECT clause of a database query. Instead, they clearly show producing a modified query (i.e., Q6) by modifying the condition in the WHERE clause of query Q5. The Section 102 rejection of claim 21 is believed to be overcome. The Section 102 rejection of dependent claims 22-26 are similarly overcome.

The Section 102 rejection of claims 27-31 are also believed to be overcome in light of the foregoing discussion.

The undersigned had argued in a previous response that Lei et al. is distinguished in that they do not show modifying the select clause. The examiner disagreed, asserting the argument to be incorrect, and pointing to the Q3 and Q4 queries in Lei et al. for showing that the "conditions of the SELECT clause are in fact modified." *O.A. page 4.*

Lei et al. modify their queries by providing a WHERE clause, or by modifying an existing WHERE clause. The WHERE clause creates a subset of the table on which the SELECT statement operates, and so in that sense Lei et al. disclose that the "conditions of the SELECT clause are in fact modified." *O.A. page 4, underlining added.* That is, the table space from which the SELECT clause makes its selection is modified, namely by the WHERE clause.

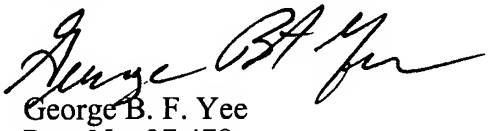
However, adding or modifying a WHERE clause does not constitute modifying the SELECT clause. The two clauses are separate and distinct elements of the SELECT statement, with separate and distinct functions. These concepts are very well delineated and understood by those of ordinary skill in the relational database arts or related arts, and have not substantially changed since their adoption by ANSI and ISO over twenty years ago.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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